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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,538	11/25/2003	Yasushi Ichikawa	Q78639	4404

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SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

GORDON, RAEANN

ART UNIT PAPER NUMBER

3711

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/720,538

Applicant(s)

ICHIKAWA ET AL.

Examiner

Raeann Gorden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,5 and 6 is/are rejected.  
7) ☒ Claim(s) 7 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egashira et al (5,252,652) in view of Tamura et al (5,585,152). Regarding claim 1, Egashira discloses a solid golf ball comprising a core and a cover (abstract; fig 2). Egashira discloses the cover may be made from commonly used cover materials but does not disclose the polyurethane composition claimed by applicant. Applicant claims a polyurethane cover containing components A, B, and C. Component A is a thermoplastic polyurethane, component B is a thermoplastic polyamide, and component C is an isocyanate mixture. Applicant discloses component C, the isocyanate mixture, is preferably commercially available Crossnate EM30 (spec 9). Tamura teaches a composition comprising a thermoplastic polyurethane (applicant's A), a polymer (applicant's B), and Crossnate EM 30 (applicant's C). The polyamide and polyurethane has a ratio of 20:80 (col. 2, lines 15-18). The polyurethane mixture is shown in examples 13-16 (table 5). E580F(1), E580F(2), E1080A(1), and E1080A(2) are mixtures of polyurethane and Crossnate EM30 (col. 15, lines 1-15). The hardness of the cover layer from 40 to 80 is an obvious feature of the composition taught by Tamura

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since applicant's composition is identical. Regarding claim 2, the isocyanate mixture features are obvious over Tamura since both disclose Crossnate EM30 as an option. Regarding claim 5, since the materials are identical the composition is obviously capable of being recycled. Regarding claim 6, the polyurethane may be a polyether polyol (col. 4, lines 12-15). One skilled in the art would have modified the cover of Egashira with the composition of Tamura to increase the mold releasing properties and impact resilience (see Tamura col. 1, lines 10-15).

#### ***Allowable Subject Matter***

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments filed 10-18-04 have been fully considered but they are not persuasive. Applicant argues one of ordinary skill in the art would not be motivated to combine the teachings of Tamura with Egashira. The Examiner disagrees. Egashira clearly discloses any cover material may be used in the golf ball, while Tamura teaches the cover composition disclosed by applicant. Tamura further teaches the composition increase mold release properties and impact resilience, both of which are ideal for golf ball covers. Contrary to applicant's arguments regarding to amended claim 1, Tamura teaches the lower limit of the polyamide/polyurethane ratio claimed by applicant as

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shown in the above rejection. With respect to new claim 6, Tamura also teaches the polyurethane may include polyether polyols.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

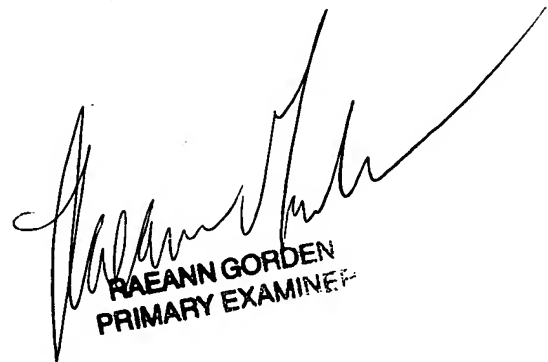
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is 571-272-4409. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 571-272-4415. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

rg  
January 7, 2005



RAEANN GORDEN  
PRIMARY EXAMINER